

# DECLARATION AND POWER OF ATTORNEY

I, the below named inventor, hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first, and sole inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled **CONTROLLING THREADING DISLOCATION DENSITIES IN Ge ON Si USING GRADED GeSi LAYERS AND PLANARAZATION** the specification of which was filed with the United States Patent and Trademark Office on June 23, 1998, as Serial No. 09/106,672, which claims priority from provisional application Ser. No. 60/059,765.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I acknowledge the duty to disclose information which is material to patentability in accordance with Title 37, Code of Federal Regulations, Section 1.56.

I hereby declare that all statements made herein based on my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

And I hereby appoint:

Maurice E. Gauthier	-	Reg. No. 20,798
Richard L. Stevens	-	Reg. No. 24,445
Matthew E. Connors	-	Reg. No. 33,298
Arlene J. Powers	-	Reg. No. 35,985
William E. Hilton	-	Reg. No. 35,192
Patrick J. O'Shea	-	Reg. No. 35,305

all of the firm of Samuels, Gauthier & Stevens, our attorneys with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

10022589.121701

I request that all correspondence be directed to:

Samuels, Gauthier & Stevens, LLP  
225 Franklin Street, Suite 3300  
Boston, Massachusetts 02110

Attn: Matthew E. Connors

Eugene A. Fitzgerald

(Full Name of Inventor)

12/22/98

(Date)

U. S. A.

(Citizenship)

Eugene A. Fitzgerald

(Inventor's Signature)

7 Camelot Road:

Windham, NH 02652

(Residence)

Same as Residence

(Post Office Address)

10022689.131701

ASSIGNMENT

Know all men by these presents

THAT WHEREAS I, Eugene A. Fitzgerald

of Windham, New Hampshire, have made an invention for

**CONTROLLING THREADING DISLOCATION DENSITIES IN Ge ON Si USING  
GRADED GeSi LAYERS AND PLANARIZATION**

described in the application filed with the United States Patent and Trademark Office on June 23, 1998, as Serial No. 09/103,672, and

WHEREAS Massachusetts Institute of Technology, a corporation duly organized and existing under the laws of Massachusetts and having a place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, for the benefit of itself, its successors and assigns, all inclusively hereinafter referred to as the Assignee, is desirous of acquiring the entire right, title and interest in and to the said invention, the said application, all inventions disclosed in said application, and any and all Letters Patent of the United States and of all other countries which may be granted for the said invention or inventions, or any of them;

NOW, THEREFORE, for good and valuable consideration provided by said Assignee, the receipt whereof is hereby acknowledged, I do hereby sell, assign and transfer to the said Assignee the entire right, title and interest in and to the said invention, inventions and application, including all priority rights arising therefrom, all inventions disclosed in said application, and any and all Letters Patent of the United States, and of all other countries, together with the right to apply for such Letters Patent, which may be granted for the said invention, inventions or any of them.

TO HAVE, HOLD AND ENJOY the said invention, the said application, and the said Letters Patent, to said

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its successors and assigns, to its and their own use and behoof to the full end of the term or terms for which the said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.

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10022689-121701  
I hereby authorize and request the Commissioner of Patents of the United States and the appropriate officers of all foreign patent offices to issue any and all Letters Patent which may be granted on the said application or applications above referred to, or for the said invention, or any of them, to the said Assignee in accordance with the terms of this instrument.

AND I hereby agree to execute and sign without further consideration any other legal document and any other assignments and any divisional, continuing, renewal, reissue or other application in and for all patents that may be appropriate and may be deemed necessary by the Assignee fully to secure to said Assignee its interests as aforesaid in and to the said invention or any part thereof and in and to the said patents or any of them.

AND I further covenant and agree that I will at any time upon request communicate to the said Assignee, its successors, assigns or other legal representatives, any facts known to me relating to the said invention and any patent that may be granted thereon, and will testify as to the same in any interference or litigation when requested to do so.

AND I do hereby covenant for myself and my legal representatives that I have not hitherto assigned or granted any license to make, use or sell said invention, and that I will not henceforth purport to assign, license or execute any instrument to that effect in conflict with this assignment.

IN WITNESS WHEREOF I have hereunto set my hand and seal this day of December 22, 1998.

  
Eugene A. Fitzgerald